

COMMUNICATIONS SYSTEM AND ASSOCIATED METHODS
WITH OUT-OF-BAND CONTROL

Abstract of the Disclosure

A communications system comprises a physical layer device (PLD) including a PLD send interface which, in turn, includes PLD parallel information outputs and at least one PLD control output. The system also includes a logical link device (LLD) which comprises an LLD receive interface which, in turn, includes LLD parallel information inputs and at least one LLD control input. First parallel communications channels connect the PLD information outputs to respective LLD information inputs, and at least one second communications channel connects the at least one PLD control output to the at least one LLD control input so that control signals are sent from the PLD to the LLD out-of-band from information signals. Accordingly, control speed is enhanced, and information throughput efficiency is not compromised. The PLD may further include a PLD receive interface including PLD parallel information inputs and at least one PLD control input, and the LLD may further comprise an LLD send interface including LLD parallel information outputs and at least one LLD control output. In accordance with this aspect of the invention, the PLD and LLD are operable in a push-push configuration. Another advantageous feature of the invention is that the interfaces may be symmetric.